CASE REPORT

A case of water on the foot

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HISTORY

A 55-year-old woman presented to the accident and emergency department 6 days after injuring her left foot. She had dropped a glass dish on her foot, breaking the dish and causing a small laceration on the dorsum of the foot. Soon after the injury she noticed that the foot was continually wet, and if she walked for even a short distance her shoe became soaked. She remarked that if she 'wiggled her foot' several times she could produce 'a drop of water' from the wound. She did not complain of any pain.

EXAMINATION AND TREATMENT

On the dorsum of the left foot was a small indurated wound 5 mm in length. If the patient rapidly plantarflexed and dorsiflexed her foot several times a globule of clear fluid appeared over the wound, then burst and trickled down the foot. X-ray showed no fracture and no foreign body.

The fluid was at first thought to be a thin sero-purulent discharge secondary to infection. Specimens for bacteriological analysis were taken, the wound was cleaned and dressed, antitetanus prophylaxis administered and the patient was asked to return in 3 days.

SUBSEQUENT PROGRESS

At the second visit the bacteriological report showed no growth of organisms and no pus cells. However, the foot was still continually wet. It was at this stage that the diagnosis of a leaking lymphatic vessel was made. Under local anaesthetic a subcutaneous silk purse string suture was inserted in an attempt to tie off the leaking lymphatic vessel.

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Fig. 1 A case of water on the foot.

After 10 days the suture was removed, but the wound continued to leak as before. After a further two weeks, the discharging wound, surrounding skin and subcutaneous tissue were excised 'en bloc' and the skin closed. This effected a cure.

DISCUSSION

The fluid leaking from the wound was not initially recognized as lymph and it was only when bacteriological analysis showed the fluid to be sterile and lacking pus cells that the correct diagnosis of a leaking lymphatic vessel was made. The only other body fluid which might have been implicated was synovial fluid. The fluid was not thought to be synovial because it lacked the characteristic yellow tinge and greasy consistency if a small drop were rubbed between finger and thumb. Lymph and synovial fluid do have distinct biochemical features (Kinmonth, 1982; Sokoloff, 1978), but because of the small amount of fluid it was not possible to collect enough for reliable biochemical analysis, even after attempted aspiration with a fine needle. However, sufficient fluid was available for cytology, and what few cells were present were lymphocytes, as would be expected in lymph (Kinmonth, 1982), and not a mixed population, as would be characteristic of synovial fluid (Williams & Warwick, 1980). Lymphography was

considered interesting but unethical in such a minor condition and therefore was not performed.

Lymphorrhoea has been described after certain surgical procedures interfering with lymphatic vessels, most often after reconstructive vascular procedures and renal transplantation (Kwaan *et al.*, 1979; Williams & Howard, 1981; Brown & Buchsbaum, 1976). These cases occur following major surgical interference with central lymphatic vessels, but lymphorrhoea following trauma to a limb is rare. Mace & Dowd (1975) described a traumatic lymphatic cyst of the arm, but this leaked lymphatic fluid on only one occasion. I can find no record of a previous report of chronic lymphorrhoea following minor trauma.

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